UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,438	10/16/2003	Luke E. Girard	10559/013002/P7171C/Intel	1578

20985 7590 08/08/2005

FISH & RICHARDSON, PC
12390 EL CAMINO REAL
SAN DIEGO, CA 92130-2081

EXAMINER	
WILLIAMS, LAWRENCE B	
ART UNIT	**PAPER NUMBER**
2638	

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/688,438	GIRARD, LUKE E.	
	Examiner	Art Unit	
	Lawrence B. Williams	2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *16 October 2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 13-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant's claim 13 cites the limitation "a flash memory in communication with the module" in line 14 of the claim. There is no description of a "flash memory" in the specification.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 9 of U.S. Patent No. 6,650,695. Although the conflicting claims are not identical, they are not patentably distinct from each other because US Patent 6,650,695 discloses a system (transceiver for digital data), comprising: an antenna (line 2); a module in communication with the antenna, the module to drive the antenna to produce carrier waves having succession frequencies (lines 4-7), the module further to drive the antenna to produce a modulated carrier wave to transmit first protocol message, the first protocol message including data for the succession of frequencies (lines 7-11), the module further to drive the antenna to produce carrier waves of at least two of the succession of frequencies prior to transmission of a second protocol message (lines 11-14). US Patent 6,650,695 does not disclose a demodulator to receive and demodulate a received differential phase shift keying (DPSK) modulated carrier wave. However, it would have been obvious to one skilled in the art at the time of invention to include in the system some type of demodulator for demodulation of the modulated carrier wave. It would also have been obvious to one skilled in the art to choose DPSK since it is known to have a clear performance advantage and is less susceptible to interference than PAM and FSK.

6. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 9 of U.S. Patent No. 6,650,695 in view of Greeff et al. (US Patent 6,169,474 B1).

(1) With regard to claim 1, US Patent 6,650,695 discloses a system (transceiver for digital data), comprising: an antenna (line 2); a module in communication with the antenna, the module to drive the antenna to produce carrier waves having succession frequencies (lines 4-7), the module further to drive the antenna to produce a modulated carrier wave to transmit first protocol message, the first protocol message including data for the succession of frequencies (lines 7-11), the module further to drive the antenna to produce carrier waves of at least two of the succession of frequencies prior to transmission of a second protocol message (lines 11-14).

US Patent 6,650,695 is silent as to a demodulator to receive and demodulate a received differential phase shift keying (DPSK) modulated carrier wave as well as the type of modulation used.

However, Greeff et al. discloses a demodulator (Fig. 5., element 52) to receive and demodulate a received differential phase shift keying (DPSK) modulated carrier wave (col. 9, lines 24-26).

Therefore it would have been obvious to one skilled in the art at the time of invention to incorporate the teachings of Greeff et al. with the invention of US Patent 6,650,695 since it is known to have a clear performance advantage and is less susceptible to interference than PAM and FSK.

7. Claim 2 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 6,650,695 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 10 of U.S. Patent No. 6,650,695 B1 discloses a system (transceiver for digital data), comprising: an antenna (line 2); a module in communication with the antenna, the module to drive the antenna to produce carrier waves having succession frequencies (lines 4-7), the module further to drive the antenna to produce a modulated carrier wave to transmit first protocol message, the first protocol message including data for the succession of frequencies (lines 7-11), the module further to drive the antenna to produce carrier waves of at least two of the succession of frequencies prior to transmission of a second protocol message (lines 11-14). Claim 10 also discloses the system of claim further including a filter in communication with at least one of the antenna and a different antenna (the RF module filters out received RF radiation, the received RF radiation inherently from another antenna, lines 1-2).

8. Claim 3 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 6,650,695 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 10 of U.S. Patent No. 6,650,695 B1 discloses a system (transceiver for digital data), comprising: an antenna (line 2); a module in communication with the antenna, the module to drive the antenna to produce carrier waves having succession frequencies (lines 4-7), the module further to drive the antenna to produce a modulated carrier wave to transmit first protocol message, the first protocol message including data for the succession of frequencies (lines 7-11),

the module further to drive the antenna to produce carrier waves of at least two of the succession of frequencies prior to transmission of a second protocol message (lines 11-14). Claim 10 also discloses the system of claim further including a filter in communication with at least one of the antenna and a different antenna (the RF module filters out received RF radiation, the received RF radiation inherently from another antenna, lines 1-2) and wherein the filter is a passband filter (line 3).

9. Claim 4 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 6,650,695 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 10 of U.S. Patent No. 6,650,695 B1 discloses a system (transceiver for digital data), comprising: an antenna (line 2); a module in communication with the antenna, the module to drive the antenna to produce carrier waves having succession frequencies (lines 4-7), the module further to drive the antenna to produce a modulated carrier wave to transmit first protocol message, the first protocol message including data for the succession of frequencies (lines 7-11), the module further to drive the antenna to produce carrier waves of at least two of the succession of frequencies prior to transmission of a second protocol message (lines 11-14). Claim 10 also discloses the system of claim further including a filter in communication with at least one of the antenna and a different antenna (the RF module filters out received RF radiation, the received RF radiation inherently from another antenna, lines 1-2) and wherein the filter is a passband filter (line 3). Claim 10 of US Patent 6,6650,695 B1 also discloses wherein the passband filter is to

filter frequencies outside of a passband surrounding a frequency (claim 10, lines 2-3) included in the succession of frequencies.

10. Claim 5 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 9 of U.S. Patent No. 6,650,695 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 9 of U.S. Patent No. 6,650,695 B1 discloses a system (transceiver for digital data), comprising: an antenna (line 2); a module in communication with the antenna, the module to drive the antenna to produce carrier waves having succession frequencies (lines 4-7), the module further to drive the antenna to produce a modulated carrier wave to transmit first protocol message, the first protocol message including data for the succession of frequencies (lines 7-11), the module further to drive the antenna to produce carrier waves of at least two of the succession of frequencies prior to transmission of a second protocol message (lines 11-14). Claim also discloses wherein the module is further to drive the antenna to produce a carrier wave of a first frequency of the succession of frequencies and to subsequently drive the antenna to produce a carrier wave of a second frequency of the succession of frequencies while transmitting the carrier waves (lines 7-14).

11. Claim 6 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 12 of U.S. Patent No. 6,650,695 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 12 of U.S. Patent No. 6,650,695 B1 discloses a system (transceiver for digital data),

comprising: an antenna (line 2); a module in communication with the antenna, the module to drive the antenna to produce carrier waves having succession frequencies (lines 4-7), the module further to drive the antenna to produce a modulated carrier wave to transmit first protocol message, the first protocol message including data for the succession of frequencies (lines 7-11), the module further to drive the antenna to produce carrier waves of at least two of the succession of frequencies prior to transmission of a second protocol message (lines 11-14). Claim 12 also discloses wherein the module is further to drive the antenna to produce carrier waves having frequencies in compliance with protocols of the Bluetooth Special Interest Group. The transceiver comprises the module, which actually transmits (first protocol) and detects the carrier waves (of at least two of the succession of frequencies) in compliance with protocols of the Bluetooth Special Interest Group.

12. Claim 7 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 13 of U.S. Patent No. 6,650,695 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 13 of U.S. Patent No. 6,650,695 B1 discloses a system (transceiver for digital data), comprising: an antenna (line 2); a module in communication with the antenna, the module to drive the antenna to produce carrier waves having succession frequencies (lines 4-7), the module further to drive the antenna to produce a modulated carrier wave to transmit first protocol message, the first protocol message including data for the succession of frequencies (lines 7-11), the module further to drive the antenna to produce carrier waves of at least two of the succession of frequencies prior to transmission of a second protocol message (lines 11-14). Claim 13 also

discloses the system of claim 1, wherein the module is included in one of a computer, a printer, and a facsimile machine.

13. Claims 8-12 are rejected under the judicially created doctrine of double patenting over claims 4, 9, 12 and 13 of U. S. Patent No. US 6,650,695 B1 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

(1) With regard to claim 8, the instant application claims a system, comprising; a dipole antenna to receive electromagnetic (EM) waves and to output a signal indicative of the received EM waves; and a module in communication with the module to receive the dipole antenna, the signal indicative of the received EM waves, the module further to decode a first protocol message included in the signal, the first protocol message including data for a succession of predetermined carrier wave frequencies, the module further to modulate a reflectivity of the dipole antenna to reflect at least a portion of received EM waves having at least two of the succession of predetermined carrier wave frequencies prior to receiving a second protocol message. The subject matter of US Patent 6,650,695 B1 is directed toward wireless digital data transmission including a transceiver transmitting carrier waves at a succession of preselected frequencies and a transponder partially reflecting the carrier waves. The instant application covers the same subject matter in claims 4 and 9.

(2) The subject matter of claim 9, a switch serially coupled across the dipole antenna, and wherein the module is to operate the switch to modulate the reflectivity is covered by claims 4, (antenna and a switch coupled to short a dipole); and claim 6 (wherein the switch is capable of opening and closing at a frequency of at least tens of kilo-Hertz; used for modulating the reflectivity).

(3) The subject matter of claim 10 is covered in claim 9, wherein the received EM waves include modulated carrier waves, and wherein module to decode the signal indicative of the received EM waves to retrieve data encoded in the modulated carrier waves (lines 7-14).

(4) The subject matter of claim 11, wherein the received EM waves include carrier waves having frequencies complying with protocols of the Bluetooth Special Interest Group is covered in claim 12.

(5) The subject matter of claim 12, wherein the system is included device chosen from the group consisting of cellular phone, a pager, a personal digital assistant, a computer, a keyboard, and a computer mouse is covered in claim 13.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

14. Claims 13-19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 18 of U.S. Patent No. 6,650,695 B1 in view of Greeff et al. US Patent 6,169,474 B1).

(1) With regard to claim 13, claim 16 of U.S. Patent No. 6,650,695 B1 discloses a system (apparatus), comprising: an antenna to receive electromagnetic (EM) waves (RF carrier waves) and to output a signal indicative of the received EM waves; a module in communication with the antenna, the module to receive the signal indicative of the received EM waves, the module further to decode a first protocol message included in the signal, the first protocol message including data for a succession of predetermined carrier wave frequencies, the module further to modulate a reflectivity the antenna to reflect at least a portion of received EM waves having at least two of the succession of predetermined carrier wave frequencies prior to receiving a second protocol message.

Claim 16 of US Patent 6,650,695 B1 does not disclose a flash memory in communication with the module. However, Greeff et al. discloses a flash memory in communication with the module (Fig. 4, element 16; col. 7, lines 15-16).

It would have been obvious to one skilled in the art at the time of invention to incorporate the teachings of Greeff et al with those of US Patent 6,650,695 B1 to store bytes of data bits (col. 7, lines 17 – 18).

(2) With regard to claim 14, Greeff et al. also discloses wherein the flash memory is to store at least one of data and instructions (col. 7, lines 15-20).

(3) With regard to claim 15, Greeff et al. also discloses wherein the module is to read at least one of data and instructions from the flash memory (col. 7, lines 19-20).

(4) With regard to claim 16, US Patent 6,650,695 B1 also discloses the system further including a switch serially coupled across the antenna, and wherein the module is to operate the switch to modulate the reflectivity (claim 15).

(5) With regard to claim 17, the limitation, wherein the received EM waves include modulated carrier waves is covered in claim 16, and wherein the module is to decode the signal indicative of the received EM waves to retrieve data encoded in the modulated carrier waves in covered in claim 14.

(6) With regard to claim 18, the limitation, wherein the received EM waves include carrier waves having frequencies complying with protocols of the Bluetooth Special Interest Group is covered in claim 17 of US Patent 6,650,695 B1.

(7) With regard to claim 19, the limitation, wherein the system is included in a device chosen from the group consisting of a cellular phone, pager, a personal digital assistant, a computer, a keyboard, and a computer mouse is covered in claim 18 of US Patent 6,650,695 B1.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a.) MacLellan et al. discloses in US Patent 5,649,296 Full Duplex Modulated Backscatter System.

b.) O'Toole et al. discloses in US Patent 6,825,773 B1 a Radio Frequency Data Communication Device.

c.) O'toole et al. discloses in US Patent 6,466,634 B1 a Radio Frequency Data Communication Device.

d.) Duan et al. discloses in US Patent 6,281,794 B1 a Radio Frequency Transponder With Improved Read Distance.

e.) Reindl et al. discloses in US Patent 6,144,332 Passive Surface Wave Sensor Which Can Be Wirelessly Interrogated.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw
August 1, 2005

EMMANUEL BAYARD
PRIMARY EXAMINER